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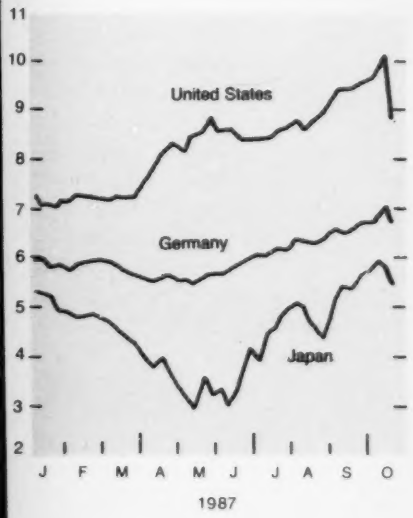
Chart 1

10-year government bond yields

percent per annum



Global growth and adjustment at risk

Scholars, politicians, and financial market participants doubtless will wrangle for years to come over the causes and consequences of this October's stock market crash. At a minimum, the crash represented belated, if abrupt, recognition of the steep rise in bond yields that initially occurred last April in the U.S. case and that gathered pace around the world following the early-September hike in the U.S. discount rate. Mid-October saw ten-year governments yielding as much as 300 basis points above the lows of last spring in both the United States and Japan, and 130 points in Germany (see Chart 1). Following the stock market crash, government yields have moved significantly lower.

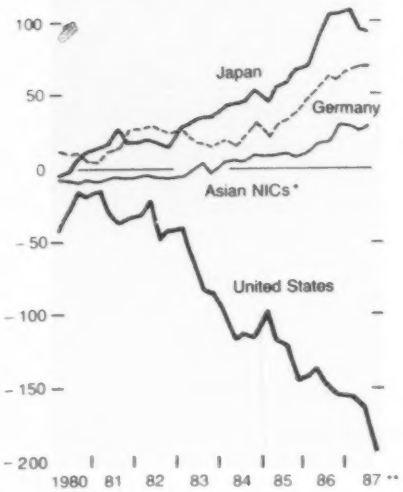
On a more basic level, the bond market developments were the logical outgrowth of last February's Louvre accord. This created the impression that satisfactory progress could and would be made in redressing the major global imbalances on the basis of existing exchange rates and policy fundamentals — those either already extant or coming shortly into place. During the spring and early summer, soothed by the Venice summit's endorsement of the Louvre judgment and encouraged by Japan's fiscal easing, the markets found a sense of security in hopes that the official view would prove sound. The hopes were dashed by the mid-September revelation of July's record $16.5 billion U.S. trade deficit and the news, one month later, of an August deficit scarcely lower. Not only was the U.S. deficit setting records, but Germany's surplus had widened since last winter, the narrowing of Japan's trade surplus had not gone far, and the surpluses of the increasingly prominent Asian NICs showed no convincing decline (see Chart 2).

Plainly, the fundamentals have failed to play by the Louvre script. The modified Gramm-Rudman-Hollings mechanism for U.S. fiscal deficit reduction has set an unambitious goal for the new fiscal year and hardly settles the budget issue. The fact that the yen and mark were not allowed to appreciate for a full eight months added needless substance to rising inflation expectations in Japan and Germany, which were compounded by central bank concerns over fast money growth. Attitudes hardened against expansionary policies in both countries, and instead inspired monetary tightening. Thus both the leading deficit country and the two principal surplus countries have shown little progress and polit-

Chart 2

Trade balances

billions of dollars, BOP basis, seasonally adjusted annual rates



*Hong Kong, Korea, Singapore, and Taiwan.

**Latest plotting, Jul-Aug estimated average, except Japan, Jul-Sep.

Table 1

Japan: shipments of manufactured goods

percent change from previous period (not at annual rates)

	1980-1985*	1986	1987 Q1	1987 Q2
Total	16.5	0.1	0.9	—0.3
Export	55.9	—1.8	0.4	—3.0
Domestic	10.6	0.5	0.9	0.4
Sectors				
Fabricated metals				
Export	—34.9	—14.7	—1.2	—15.5
Domestic	0.0	0.2	4.9	—2.2
Transportation				
Export	28.6	—10.5	3.8	—11.7
Domestic	0.9	1.2	—1.6	—4.1
Electrical machinery				
Export	189.5	4.9	—0.1	—1.7
Domestic	82.3	8.0	3.6	1.4
Chemicals				
Export	24.6	17.2	3.1	—4.8
Domestic	16.0	—0.9	3.5	—0.7

*Cumulative percentage change.

ical will to reorient their domestic policies in the interest of reducing external imbalances. Premature stabilization of the dollar has been as "counterproductive" for global growth and adjustment as the "hard landing" crash that stabilization efforts were supposed to preclude.

This article reviews the actual progress of trade adjustment among the major countries; considers the reasons and the means to press it further; assesses recent domestic performance and policies as they relate to international adjustment; and offers recommendations.

The markets have fired a warning shot across the bow of the good ship G-7. More conciliatory now, the U.S. Administration and Congress may go beyond the immediate Gramm-Rudman-Hollings mandate on fiscal restraint. Surplus countries then need to follow up with expansionary measures, opening the way to orderly realignment of exchange rates in due course. Otherwise, market instabilities will recur and global economic progress be in grave jeopardy.

Stubborn external imbalances

Progress in reducing imbalances has been patchy and limited. It has fallen short of predictions based on historical experience, leaving yawning trade gaps not only for the leading industrial economies but also for the Asian NICs.

On the positive side, the slowdown in Japan's exports has continued in 1987, especially for fabricated metals and transportation equipment (see Table 1). Overall export volume was off 2.4% for the first nine months of 1987 on a year-over-year comparison, while total imports rose 6%. Officials stress the much steeper rise in Japan's imports of manufactures which, excluding gold, jumped 19% in volume terms. Of course, the jump was from a very low base. Still, contrary to common assumption, at least some of Japan's imports respond to yen appreciation (in yen terms Japan's manufactures import prices averaged 24% lower this year to date than in all of 1985).

Having dropped 1.3% of GNP in 1986, Japan's real net exports may be down another 0.8% this year. Yet there is far to go in rectifying the external imbalance in dollar terms. The overall trade surplus has ebbed but the only significant bilateral declines have been with China, the Middle East, and some commodity-producing countries. Japan's reduced exports to China reflect Chinese spending cuts. Its rising imports from oil and other commodity producers mainly reflect price developments. Meanwhile, Japan's trade surpluses with North America and Europe continue stubbornly high (see Table 2). For 1987 as a whole, Japan's trade surplus may be down little and its current account surplus may brush last year's record. Further, machinery orders suggest that the falloff in exports is nearing its end.

Germany has experienced some limited volume adjustment in its external trade. Its real net exports fell 1.1% of GNP in 1986 and may dip a further 0.5% this year. Its finished goods imports rose at an 8% annual rate during the two quarters of domestic weakness last winter and continued strong through mid-1987. However, unlike Japan, Germany has not seen any protracted fall in exports. Indeed, in the second quarter its export volume reached a record and orders point to further gains. So far in 1987 Germany's current account surplus has run at an annual rate $8 billion higher than last year, much of the increase occurring in trade with its European partners (see Table 3). Partly in consequence, Italy's current account surplus has faded away and both Britain and France have seen their

Table 2

Japan: bilateral trade balances

CIF, billions of dollars at annual rates

		3 months ended September 1987	
	1986	Actual	Change from year earlier
United States	51.4	53.5	—1.6
Canada	0.6	—0.7	—1.1
Western Europe	19.4	22.3	—0.5
Southeast Asia	12.3	12.5	—4.4
China	4.2	—0.3	—5.5
Middle East	—8.6	—11.0	—4.7
Latin America	3.3	1.7	—1.2
Total	82.7	78.3	—20.2

Table 3

Germany: bilateral trade balances

CIF, billions of dollars at annual rates

		3 months ended August 1987	
	1986	Actual	Change from year earlier
United States	13.2	13.5	—0.8
EC	24.0	33.2	6.5
Non-oil developing countries	—0.7	—1.5	—1.5
OPEC	2.2	1.3	—2.1
Eastern Europe	2.3	1.4	—1.4
Total	52.1	60.7	1.0

current accounts slide into deficit — trends that are not sustainable.

The good news on U.S. trade adjustment lies in the slowing of import growth and, more especially, the strong, if belated, recovery of exports. From the third quarter of 1986 through the second quarter of this year, non-oil import volume rose at a mere 2.4% annual rate. By contrast, agricultural exports climbed 13% by volume and other merchandise exports only a little less. U.S. exporters have started to win back world market share: the 1987 volume increase in U.S. manufactures exports, for example, may reach 12% — at least triple foreign import growth. External trade should add 0.4% to U.S. growth this year. Already, in the final quarter of 1986 and the first of 1987, it contributed more than two-fifths of the gain in real GNP.

Unhappily, in the second quarter of 1987 and still more in the third, the trend of improving real net exports was interrupted. With the terms of trade moving adversely, the trade deficit in dollar terms actually widened. The red ink reached an annual rate of $171 billion on the CIF valuation in January-August, substantially greater than in the same months of 1986 and worse by a staggering $14 billion vis-à-vis Asian countries (see Table 4). With no repeat of the 1986 special gold shipments, U.S. exports to Japan *fell* 3%, while imports were virtually unchanged; and, although the United States exported 24% more to the four principal Asian NICs, its much larger imports from the four jumped 27%.

U.S. adjustment is impeded by demand restraint abroad, where investment spending is weak by historical standards, undermining demand for U.S. capital goods. Demand weakness has imposed remarkable pricing restraint on U.S. exporters generally. In the second quarter of 1987 U.S. export prices were up only 0.8% from a year earlier and remained below the average for 1985. Farm prices stayed depressed. Prices for capital goods were up just 1% over the two years and those for autos and consumer goods only 4%-6%. Some, but not all, of the explanation lies in the tendency of U.S. firms to set their export prices much in line with those for domestic sales. Consequently, in yen or European-currency terms, U.S. exporters have cut prices steeply since 1985 — "passing through" to foreign purchasers virtually 100% of the dollar's depreciation.

This contrasts with the minimum-pass-through, U.S.-market-sensitive pricing practiced by other industrial countries and the Asian NICs. The dearth of attractive alternatives has driven them to every effort to hang on to U.S. market share, taking advantage of the leeway afforded by the high profits earned at the dollar's peak, lower oil and raw material costs, and domestic conditions conducive to compressing labor costs. This has retarded increases in U.S. import prices. Of course oil prices have actually fallen. Among manufactures imports price gains were more marked — almost 17% for autos and about 14% for both capital and consumer goods — but paled beside the dollar's 22% depreciation in broad, real effective terms. Not surprisingly, import penetration of the U.S. market remains historically high.*

*To a large extent, the limited pass-through of the dollar's decline to U.S. import prices mirrors experience during the dollar's earlier appreciation: from 1981 through 1985, while the dollar rose 24% in broad, real effective terms on a calendar-year average comparison, the national accounts deflators for U.S. imports of capital goods, autos, and consumer goods declined 14%, 2%, and 4%, respectively, relative to final-sales deflators; these moderate falls help explain why the subsequent return of the dollar close to its 1981 real level has raised relative import prices for the same three product sectors just 11%, 11%, and 8%. Effective price adjustment likely runs higher, since changing credit and service terms are not captured in recorded import prices.

Table 4

United States: bilateral trade balances

FAS/CIF valuation; billions of dollars at annual rates; not seasonally adjusted

		Year-to-date ended August 1987	
	1986*	Actual	Change from year earlier*
Japan	—58.6	—59.4	—1.2
*Canada***	—13.9	—10.7	3.5
Western Europe	—32.6	—30.6	4.7
Germany	—15.6	—16.5	0.4
France	—3.4	—3.3	0.5
United Kingdom	—4.6	—3.7	0.9
Italy	—6.5	—6.3	0.6
Netherlands	3.5	4.0	1.0
Latin America	—13.6	—15.6	—1.1
Brazil	—3.5	—4.2	—0.1
Mexico	—5.2	—6.1	—1.0
*OPEC****	—4.6	—7.7	—3.1
Asia excluding Japan	—37.4	—49.1	—12.8
Hong Kong	—6.5	—6.4	—0.4
Korea	—7.1	—9.8	—2.9
Singapore	—1.5	—2.1	—0.8
Taiwan	—15.7	—19.7	—4.4
Other countries	0.4	2.0	1.6
Total revised statistical month	—166.3	—177.5	—14.4
Total Canada adjusted	—160.3	—171.1	—8.4

*1986 data were reported on a basis that the U.S. Department of Commerce discontinued in 1987. Thus, year-earlier comparisons are approximate.

**Beginning in 1987, monthly trade data include an adjustment for understated exports to Canada. Adjusted monthly estimates for 1986 were obtained by prorating the 1986 annual adjustment.

***Excluding Ecuador, Indonesia, and Venezuela.

Another obstacle to U.S. trade adjustment is the domestic oil demand-supply imbalance. This year's net imports have averaged 5.9 million bpd so far, 33% above the 1985 average. Valued at $19 per barrel, they now contribute over $40 billion to the trade deficit. Domestic oil consumption may rise 2% in 1987, while production may dip some 350,000 bpd, or 3.5%. These are smaller percentages than recorded in 1986, but bring net imports to 37% of 1987's consumption, up from 28% just two years ago.

Despite this year's disappointments, some alleviation of the major global imbalances should yet come to pass given the present U.S. and foreign demand outlook. If the dollar falls no lower, the 1988 U.S. trade deficit may narrow to perhaps $150 billion CIF, down $25 billion from the likely 1987 outcome. Since U.S. net investment income is sliding inexorably into the red, the current account deficit would shrink much less, perhaps by only $7 billion, to $159 billion. Beyond 1988, however, the combination of a dollar locked near present levels with an already adverse U.S. inflation differential would soon halt adjustment. The U.S. current account would swiftly deteriorate and net international liabilities could rocket from an estimated $414 billion at the end of this year to as much as $900 billion, or 18% of U.S. GNP, by end-1990 (see Chart 3).

If, as interest rate differentials suggest, the dollar winds up falling moderately, the 1988 U.S. current account outcome would improve slightly to around $150 billion (see Table 5). Other principal countries would see modest reductions in their current account surpluses, to perhaps $79 billion for Japan and $37 billion for Germany in 1988, down $7 billion and $3 billion, respectively, from the likely 1987 results. Thus, more than two years' effort to tackle global imbalances promises no quick resolution.

Approaches to adjustment

There is no unanimity on what, if anything, should be done to advance international adjustment. Some analysts judge the imbalances to be of little concern. It is said that impressive employment gains, respectable output growth, and improving productivity — all amid moderate inflation — show the U.S. economy to be thriving despite, or even thanks to, the trade deficit. Moreover, the U.S. deficit has underwritten world recovery from the recession of the early 1980s and other economies still are not ready to cope without U.S. stimulus. Besides, the deficit ultimately is financed by investors in the surplus countries who voluntarily place funds in the United States in expectation of superior returns, or by their governments who deem it in their interest to avert further depreciation of the dollar. A number of the surplus countries see themselves as members of an informal dollar area, within which payments imbalances need not be addressed. Others maintain that the dollar already stands at a proper level and that adjustment will take care of itself in due course.

There further is a tendency to exaggerate the role of non-OECD countries, neglecting the fact that trade with industrial countries accounts for three-quarters of the overall U.S. trade deficit and still more of the surpluses of Japan and Germany. Some U.S. politicians, arguing that LDC financial problems perpetuate the U.S. trade deficit, see the answer in debt relief. Yet while U.S. trade with Latin America showed an annual rate deficit of over $15 billion in January-August this year, versus a surplus of $5 bil-

Chart 3

U.S. current account and net foreign debt

billions of dollars

lion in 1981, the swing represents less than one-sixth of the $130 billion overall U.S. trade balance deterioration. In any event, it is naive to suppose that the bilateral swing can be easily undone, given the urgent need to increase LDC *exports* — a key prerequisite for restoring the import capacity and economic growth of the debtor countries and returning them to creditworthiness.

Another obstacle to global adjustment is seen in the surpluses of Taiwan, Korea, and Hong Kong, which may aggregate $49 billion this year on current account. The transfer of technology, materials, and management skills to low-cost areas — most conspicuously the Asian NICs, but also Mexico and elsewhere in Latin America — increases global goods supply, swelling the trade deficits of the more open industrial countries, particularly the United States. Given time, it is said, the global demand-supply gap will close as the low-cost areas boost spending, certainly once Latin America's problems are sorted out. Until then, adjustment by industrial countries would be unlikely to blunt the fundamental competitiveness of the low-cost areas but could retard their exports and spending through world recession or impaired market access. Attempts to speed adjustment might be counterproductive.

Adjustment risks there surely are, but go-slow arguments are far too complacent about the costs, actual and potential, of failure to come to grips with the imbalances among the industrial countries themselves. The actual costs center on the consequences of the below-potential — and certainly suboptimal — growth that Japan and Continental Europe have settled for over the last several years. Their poor performance does no favors for their own peoples and unnecessarily burdens other countries besides. The global waste implicit in deficient demand in Japan and Europe today cannot be compensated by increased demand in the Asian NICs or others tomorrow.

The potential costs of inadequate adjustment include disruption of global goods and financial markets. Just as the growth in U.S. imports has increased the interdependence of the world's goods markets, so too has global deregulation heightened it in financial markets. Interdependence improves opportunity but increases vulnerability, real or imagined. For example, the buildup of U.S. liabilities to foreigners, whether on a gross or net basis, is increasingly seen to circumscribe U.S. policy-making independence.

Adjustment complacency is not the mood of financial markets, which are acutely sensitive to the ebb and flow of U.S. economic and political thinking, notably on trade protection and price stability. On protection, not only would intensified U.S. restrictions entail significant costs in economic efficiency but adverse currency and credit market reactions could multiply the damage. In this connection, many financial market participants believe last April's deterioration of U.S. bond markets was triggered by the decision to impose punitive tariffs in the U.S.-Japan semiconductor dispute. Financial market reaction was similarly damaging more recently as the perception spread that the U.S. authorities were willing to accept higher inflation for the sake of short-term gains in activity and jobs. At the least, the attendant higher interest rates bloat the expense of servicing the U.S. external debt. More seriously, they now have devastated stock markets around the world and further may precipitate recession. That would make bitter reality of the long-playing prophecy of the world economy's inevitable "hard landing."

To help avert such calamity, more

Table 5

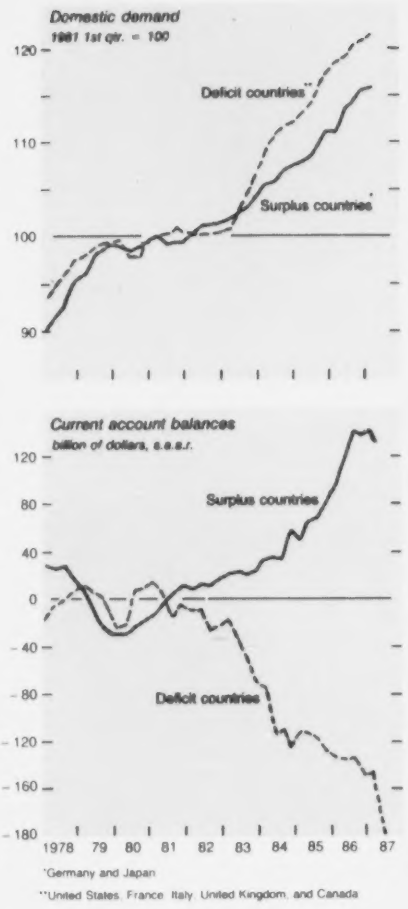
Current account balances

billions of dollars

	1986	1987	1988
United States	—141	—167	—152
Japan	86	86	79
Germany	37	40	37
France	3	0	—1
Italy	5	1	—2
United Kingdom	—1	—3	—5
Canada	—7	—7	—7
Hong Kong	4	11	9
Korea	5	12	10
Singapore	1	0	0
Taiwan	16	26	24

Chart 4

Growth breeds deficits



*Germany and Japan

**United States, France, Italy, United Kingdom, and Canada

decisive adjustment is needed, and without delay. Yet the adjustment medicine appropriate for small countries may do more harm than good if unthinkingly urged upon the large. Whereas adjustment by a small country has no important global ramification, the same does not hold true for the large, least of all for the U.S. economy that generates 35% of industrial-country GNP. Even so, the United States will have to take the orthodox medicine, restraining domestic demand to free up resources and shifting relative prices to ensure that the resources go to work in export and import-competing production. To sustain global demand as this occurs — and, not incidentally, to complement and assist U.S. adjustment — countries in external surplus and with spare domestic capacity should *spend* their surpluses by expanding their domestic demand. Yet countries in surplus — in present circumstances, principally Japan, Germany, and some of the Asian NICs — are always reluctant to expand. They typically view surpluses as prudent and virtuous provision against future adversity. Further, being net external investors rather than borrowers, they are little influenced by outside pressure. This systemic failing helps explain the spreading perception that orthodox medicine is ineffective.

To the contrary, the medicine is highly effective when taken in the right dosage. More than one episode in recent history shows that adjustment occurs at a dramatic pace, once appropriate policies are in place. The outsize OPEC surpluses that followed the 1970s' price shocks speedily eroded, partly because all the oil exporters proved to be "high absorbers." They stepped up their imports unexpectedly fast; their vast terms of trade gains were passed on to their private sectors, which were willing to consume or invest, or spent by governments for social and infrastructure investment. At the same time, most oil importers passed on 100% or more of oil-price increases to their domestic users. Terms of trade losses translated into real income reductions — admittedly, precipitating grievous recessions — and also into relative price incentives to conserve energy. Thus both income and price factors proved powerful tools of adjustment and their effects were reinforced by a fair degree of policy coordination among the major countries.

For several reasons, global coordination efforts have been relatively impotent in the 1980s. First, the increased economic weight of other major industrial countries makes them less beholden to U.S. leadership. Second, global financial change and innovation render uncertain the quantitative effects of monetary policy, coordinated or not. Third, the proper coordination of fiscal policies now would require much larger adjustments of existing programs, relative to GNP, than in the mid-1970s. Fourth, the 1970s' experience of inflation calamity and public-sector excesses gave fiscal policy — and demand management generally — a bad name; only recently, and with much misgiving, has activist fiscal policy recovered some shred of acceptability, at least if dressed in supply-side garb.

Moreover, perversely, some of today's surplus countries have followed the rules written for *deficit* countries and have been reluctant and tardy in spending real income gains in the form of stepped-up domestic demand (see Chart 4). Tight-fisted fiscal policies have held down public spending or resisted tax cuts, thereby failing to counter the contractionary effects of currency appreciation. As a result, spending is discouraged by employment worries even where, as in Germany, workers have won sizable wage increases.

Table 6

*Terms of trade gains and losses**

percent of real GNP

	1986	*1987*
United States	0.3	—1.0
Japan	2.0	0.2
Germany	2.9	0.5
France	2.4	0.2
Italy	2.9	0.4
United Kingdom	—1.1	—0.1
Canada	—0.9	0.6

*The figures represent the amount by which real national income rises or falls as a result of changes in prices of exports relative to imports.
Source: OECD.

Table 7

Japan: sources of growth

percent change from previous period at seasonally adjusted annual rates

	1987			
	Year	*Q1*	*Q2*	*1988*
Domestic demand	4.2	3.2	4.8	4.1
Private consumption	3.2	7.6	2.6	2.8
Government consumption	0.0	—37.1	3.4	2.7
Business fixed investment	6.4	10.5	5.4	4.0
Residential investment	15.6	2.5	18.1	7.3
Government fixed investment	7.7	4.2	7.7	8.5
*Inventory investment**	0.4	0.2	0.3	0.7
*Net exports**	—0.8	2.1	—4.6	—0.7
Exports	—0.1	10.2	—6.3	—0.7
Imports	5.8	—2.5	26.0	4.3
GNP	3.2	5.3	0.0	3.2

*Change as percent of previous period's GNP; inventory investment estimated as a residual.

Spending in Japan is further deterred by competition from the Asian NICs, which has discouraged Japanese workers from pressing for higher wages. Moreover, in both Germany and Japan, there is too easy acceptance of the claim that wage increases are inflationary — an unreasonable contention if wage increases fall short, as they actually have, of the *sum* of productivity growth and terms of trade gains (see Table 6).

At the same time, whereas U.S. wage moderation, particularly in real terms, has been appropriate to the goal of external deficit adjustment, actual adjustment progress has been limited. The culprits have been unexpectedly robust domestic demand, thanks to the delay in tackling the fiscal deficit and the willingness of the private sector to borrow as necessary to sustain spending, and the "dollar pass-through" problem that, as discussed earlier, has prevented relative price changes sufficient for adjustment.

In sum, there have been shortcomings on the part of both surplus and deficit countries in implementing the orthodox income and price approach to external adjustment. The approach remains valid, but the shortcomings have to be addressed. The price aspect could be tackled by rendering existing pricing practices either untenable — through a sufficient further fall in the dollar — or unattractive, through U.S. demand restraint and stepped-up spending in other countries to reduce the *relative* appeal of the U.S. market for producers around the world. To some extent, price adjustment can substitute for income adjustment. The extent of further currency changes required to correct world imbalances is critically dependent on domestic demand trends in Japan, Europe, and the United States itself.

Growth in Japan

Because Japan's current account surplus is so large — about 3.5% of GNP this year — appropriate adjustment measures must be correspondingly large in scale and *sustained* over time. Japan's terms of trade gains, amounting to 2.2% of GNP in 1986-87, have to be passed through to economic sectors that will spend them, both on domestic and imported products. Public investment is an obvious candidate. So too must be private consumption, fortified by real wage increases in excess of productivity gains. With supportive policies, Japan should be capable of noninflationary growth distinctly above its approximately 4% annual potential for several years to come. Yet, Japan's actual performance falls short of potential and the future of its internal and external adjustment still is problematic.

At first glance, trends in 1987 make this assessment seem overly harsh. The economy is expected to grow by 3.2% this year and next, despite a 0.8 percentage point shrinkage of net exports in both years. Domestic demand growth accelerated to 4.8% annualized between the first and second quarters of 1987 (see Table 7), with private consumption growth averaging over 5% in those quarters — about two percentage points faster than in 1985-86. In the first eight months, housing starts soared 21% above the year-earlier pace. Moreover, Japan's fiscal policy has eased since last winter. Public investment could grow 8% in 1987 — almost double last year's rate. Taxes are being cut this fiscal year by a net 1.5 trillion yen, or 0.4% of GNP, with the maximum personal rate lowered from 70% to 60%. The tax cuts, plus waning fears of unemployment, should lessen the likely slowing of consumption in the second

half of this year.

Though Japan's fiscal easing should properly be a continuing endeavor, it may prove in fact a one-shot affair. Even in 1987, the fiscal posture is stimulative only if compared with the initial plan for the year; relative to the 1986 result, the posture for 1987 as a whole is slightly restrictive. Now, just a brief run of positive news on the economy's performance and adaptation to a 145-155 yen-dollar rate has resurrected earlier goals for long-run budgetary balance. Next year's newly enacted — and, in itself, desirable — termination of certain savings preferences, plus the indirect tax increase that the government may again propose, could largely undo the current year's net tax reduction and tighten fiscal policy anew.

Japan's monetary policy already is tilting toward restraint, with short-term interest rates edging higher and long-term rates up sharply since the spring. The Bank of Japan is anxious about inflationary pressures, and not only on Tokyo land prices, despite the prospect that consumer prices generally should not rise much above 1% this year or next. The monetary aggregates are rising more rapidly than in some previous years and the pace has picked up in recent months. To an extent this reflects the continuing effects of deflation and financial liberalization. But stepped-up monetary growth also results from efforts to hold down the yen. Were the yen to rise in line with fundamentals, overall inflationary pressure in Japan would be nugatory.

As it is, Japanese consumers face notoriously high prices in some sectors, partly through lack of effective openness to imports. They also are receiving slim wage increases. Nominal wages in the first half of 1987 were just 2.8% above their year-earlier level, below the 3% growth trend in economywide real productivity since 1980, let alone its 4% rise in the first half of this year. The shortfall is yet larger in manufacturing, where productivity runs above average but earnings have risen only 1.8%. The general softness of wages reflects subdued domestic demand and employment during the 1980s as a whole. In addition, Asian NIC competition is curbing Japanese wages in manufacturing and, by institutional extension, in the wider economy too. Japanese consumers therefore have received only a fraction of the nation's terms of trade gains.

A related drag on trade adjustment has been the 20% cut in Japan's manufactures export prices in yen terms during the past two years, made possible by sheltered profits at home, wage docility, productivity gains, and greatly reduced imported input costs. Quite small increases in dollar selling prices have turned out consistent with satisfactory overall business profits at the present yen exchange rate. Unhappily, this prolongs reliance on export markets.

How can price and income adjustments be brought about that will correct Japan's external imbalance and realize the economy's potential? Conceivably, a run-up in commodity prices could bloat Japan's import bill and curb its overall trade surplus. Such a "solution" — implausible though it is — might do little to redress Japan's surpluses with North America and Europe and certainly would not promote growth. Another scenario might see the Asian NICs losing competitiveness through currency appreciation or large-scale wage increases; Japanese firms then would have less reason to penny-pinch their own labor costs and could more readily accommodate domestic wage pressures should Japan's economy pick up steam. This scenario may be one

possibility for the future, but is not today's actuality.

The hard truth is that Japan is unlikely to adjust externally if the authorities cling to the present yen exchange rate and yield to their inclinations to tighten domestic policies. Perniciously, that would increase Japan's reliance on external demand for growth, prematurely terminating the overdue shift toward reliance on domestic sources. Japan instead needs a policy framework accepting that the yen will rise further and targeting domestic demand for several years to come to contribute five percentage points annually to the economy's growth. Real GNP growth then would run close to Japan's 4% potential rate and the negative contribution of net external demand could serve to work the current account surplus down to $47 billion by 1990 — still sizable, but far more consistent with global adjustment than the $70 billion surplus that existing tendencies suggest. Multiyear fiscal expansion would have to be the principal instrument. Unfortunately, no such plan — rather, the reverse — is currently on Japan's agenda.

Growth in Europe

The terms of trade gains associated with currency appreciation and lower energy prices have flowed through more fully into consumer real incomes in Europe than in Japan. Yet, the resulting spur to Europe's economic activity has proven weak. With external demand shrinking and domestic demand falling short of original expectations, Europe's overall real GNP growth has not picked up this year. Although it has accelerated in Italy and the United Kingdom, growth has sagged in France and Germany.

Germany's disappointing performance is the core concern, deteriorating during 1986 as a small real export decline, largely reflecting OPEC and East European austerity, prompted firms to slow investment and consumers to step up saving. Domestic manufacturing orders fell from mid-1986 through the middle of this year, only reviving in August. However, private consumption perked up in the second quarter (see Table 8), soon after the new metalworkers' contract called for a 3.7% wage increase. Real wages should be up more than 2% economywide in 1987, shifting to workers some of the earlier terms of trade gains that initially had accrued largely to profits. Still, consumers are likely to receive very modest real wage increases in 1988 and 1989, while the shorter workweek prescribed by the wage agreement will raise employers' labor costs and depress employment.

Germany's industrial production has fallen and its unemployment has risen so far in 1987. Although both turned around in August, optimism would be premature. Real GNP growth may not exceed 1.5% for the year as a whole, compared with the 2.5% achieved in 1986, due to the slide in domestic demand growth from 3.5% last year to 2% for 1987. This domestic weakness is holding down Germany's imports, in turn depressing growth elsewhere, particularly within Europe.* France and Italy — neither with strong balance of payments positions — will again show real net export declines this year. Germany's real net exports may be down just 0.5% of GNP this year, much less than the 1.1% decline in 1986. Next year, despite expectations of slightly stronger domestic demand growth, real net exports may erode hardly at all unless the mark appreciates. In sum, though real GNP growth may edge a

Table 8

Germany: sources of growth

percent change from previous period at seasonally adjusted annual rates

	1987			1988
	Year	Q1	Q2	
Domestic demand	2.1	—2.3	4.1	2.5
Private consumption	3.0	—3.6	12.8	3.5
Government consumption	1.0	2.0	1.0	2.0
Equipment investment	3.0	21.5	—7.6	1.5
Construction	—1.5	—45.3	52.3	1.0
*Inventory investment**	0.3	7.2	0.0	0.0
*Net exports**	—0.6	—0.8	0.1	—0.2
Exports	1.5	—8.0	10.3	2.0
Imports	4.5	—6.6	11.0	3.0
GNP	1.5	—3.0	4.1	2.2

*Change as percent of previous period's GNP; inventory investment estimated as a residual.

*Being so highly integrated into the world economy, some of the smaller European countries — the Netherlands, for example — would rather reduce real wages and domestic growth than suffer export declines.

little above 2% in 1988, Germany's performance, as distinct from intention, may contribute little to constructive international adjustment.

On the face of it, Germany has eased both fiscal and monetary policies this year. The Bundesbank has acquiesced in considerable overrun on its money supply objective, with CBM (central bank money) rising at an annualized 7.8% during the first nine months of 1987 versus a target of 3%-6% for the year as a whole. The Bundesbank is concerned that chronic overruns could jeopardize its credibility. This year's overrun, however, is less stimulative or inflationary than appears, in part because international investors betting on an appreciating mark have helped swell the demand for German money. Still, CBM growth has slowed since last winter, if with some pickup in the last two months. Of course, rapid money growth does not automatically push up prices in an economy that is far from full employment. In Germany today, actual nonenergy, nonfood inflation remains very slight. Land and commodity prices, in mark terms, still are below their levels of two or three years ago. And prospective nominal wage growth is low. These facts leave little basis for the degree of inflation anxiety now subsumed in German long-term interest rates, nor for the Bundesbank's recent steps to tighten at the short end.

On the fiscal side, the first half of 1987 saw Germany's combined federal-state cash deficit run at an annual rate of DM13 billion, or 0.6% of GNP, above the corresponding 1986 figure. The bulk of the widening was cyclical as revenues were undermined by the economy's unexpected weakness. In 1988, the second tranche of a three-stage tax reduction and reform is due, cutting taxes by DM14 billion, or 0.7% of GNP. The third tranche would cut net taxes in 1990 by a further DM20 billion, or 1% of GNP, lowering gross taxes by DM39 billion but recouping DM19 billion by scaling back subsidies and preferences.* Following protracted dispute, the coalition recently agreed on savings aggregating DM18 billion, of which DM4 billion is supposed to come from a 10% withholding tax on German interest income. For modest revenue gain, this new impost has demoralized the bond markets, while the package otherwise adds up to something less than a frontal assault on the subsidy and preference apparatus. Still, the net tax cut should bolster the medium-term outlook for German growth. Even better would be implementation of the 1990 tranche well ahead of schedule, giving domestic demand a swift and potent tonic.

Considering Germany's large current account surplus, its minimal rate of inflation, and its economic leadership of Europe, German fiscal policy should countenance budget deficits *consistently* sufficient to foster annual domestic demand growth of 4%. If the mark also is allowed to appreciate, the current account surplus could be worked down to $15 billion by 1990 and the negative contribution of external demand would hold Germany's real GNP growth to a noninflationary, yet unemployment-reducing, 3% annually. Unfortunately, steadfast implementation of this approach to adjustment runs afoul of domestic politics and the limited popular acceptance of activist fiscal policy.

U.S. growth and inflation

If the United States is to correct its trade and current account deficits,

*The reform adjusts marginal rates in the middle- to upper-income brackets, but the top rate is to fall only from 56% to 53% and corporate relief will be small. Thus the reform does not significantly restructure incentives for entrepreneurship and efficiency, as in the U.S. case. Rather, it amounts to a traditional Keynesian stimulus.

Table 9

United States: sources of growth

percent change from previous period at seasonally adjusted annual rates

	1987			1988
	Year	Q2	Q3	
Domestic demand	2.2	2.4	4.0	2.1
Private consumption	2.1	1.9	4.8	2.4
Government purchases	2.6	3.8	4.7	2.0
Business investment	0.3	11.7	23.7	4.0
Residential investment	—0.8	—2.8	—0.2	—7.0
Inventory investment*	0.5	—0.9	—0.3	0.2
Net exports*	0.4	0.1	—0.2	0.8
Exports	11.0	17.9	16.5	11.0
Imports	5.9	11.1	16.5	3.5
GNP	2.6	2.5	3.8	2.9

*Change as a percent of previous period's GNP.

it too must make appropriate income and price adjustments. Impressive job creation since 1982 has brought the economy to the verge of full employment, implying a need for domestic restraint to free resources for trade improvement. Estimates of the annual potential growth of U.S. real GNP cluster in a 2.5%-2.7% range. If one percentage point is to be taken up by net external demand — reversing by 1990 most of the deterioration the United States has sustained during the 1980s so far — domestic demand can grow hardly more than 1.5% annually without escalating inflation.

Recently, actual domestic demand growth has run distinctly higher — averaging over 3% in the first two quarters of 1987 (see Table 9) rising to 4% in the third. Restraint requires private and public spending discipline. The first is contingent on sustained wage moderation, the second on difficult budgetary decisions. Finally, relative prices must make the employment of resources profitable in export and import-competing production, in particular, requiring that U.S. import prices rise significantly relative to general domestic prices.

The need to free resources for trade improvement does not yet apply to U.S. plant and equipment capacity, despite the 4.5% increase in manufacturing production in the twelve months through September. Capacity utilization in U.S. manufacturing was only 81.5% that month. This was two percentage points above the year-earlier level but far below the 86.5% attained during the inflationary 1978-80 period.

U.S. labor resources are another story. The fall in the unemployment rate — to a September figure of 5.9%, down from 7% twelve months earlier — leaves it nudging even the more optimistic estimates of the U.S. economy's NAIRU (nonaccelerating inflation rate of unemployment). Scattered labor shortages and wage pressure are emerging in various skills and regional markets. Were more pervasive shortages to develop, the hard-won climate of wage "realism" — bred by deregulation, international competition and, not least, the last recession — could not be sustained. Already, legislative initiatives manifest dissatisfaction with the long-standing decline in real wages, in terms of hourly earnings per head. Nominal wage acceleration now may be at hand, although real wages may not turn upward for some time in view of contractual inertia and the slow revision of inflation expectations.

The fiscal posture remains a key obstacle to prudent management of overall U.S. domestic demand. True, public spending growth has been slowing in real terms since 1985, when measured by government purchases, while the federal deficit tumbled from FY1986's $221 billion to just $148 billion (3.3% of GNP) in the fiscal year just ended.* But, even complying with the revised Gramm-Rudman-Hollings provision, the deficit may back up to $165 billion or more in FY1988, a posture that would not manifest restraint.

How then may appropriate demand restraint be achieved? Whether or not help comes from the budget, monetary policy has the key discretionary role. September's rise in the discount rate was put through in a climate of concern about budgetary impasse and inflationary pressures despite the record of much-reduced growth in the monetary aggregates this year, the evidence that actual inflation has slowed in recent months at most

*A bonanza in capital gains tax collections, plus front-loading aspects of tax reform and miscellaneous one-shot actions, largely explain the improvement. These factors may contribute less, or work in reverse, during FY1988. However, it is worth remembering the gross inaccuracies that have long plagued forecasting of the budget outcome, culminating in the extreme underestimation of deficit reduction in FY1987.

Table 10

U.S. inflation

*selected indices; annual rate percent changes**

	Latest 12 months	*Latest 6 months*	*Latest 3 months**
GNP deflator			
Implicit	4.1	5.5	4.9
Non-oil imports	5.5	8.2	14.8
Consumer prices	4.3	4.6	4.3
Excluding food and energy	4.2	4.5	3.8
Goods	4.4	4.6	3.6
Services	4.2	4.5	4.9
Producer prices			
Finished goods	3.2	3.3	1.9
Intermediate goods	4.2	5.4	7.3
*September commodity prices***	19.9	20.4	18.2
Food	4.3	9.9	—2.0
Industrials	32.1	28.2	34.5

*Data are through September 1987, except for consumer prices (August) and the GNP deflators (1987 Q2).
**Commodity Research Bureau.

levels of the U.S. economy (see Table 10), and the likelihood that a combination of tight monetary policy with dollar stability will deter the rise in U.S. import prices essential to expenditure switching and trade adjustment.* October's stock market crash interrupted the tightening monetary trend, at least temporarily, as the Federal Reserve rightly moved to supply liquidity to safeguard the financial system. The stock market action leaves a legacy of uncertainty and impaired net worth that is likely to slow private consumption and investment. In turn, this could help avert overheating of the labor market, the central objective of counterinflation policy. Still, amid continuing market turmoil it is too soon for any confident assessment of the scale and timing of the economic fallout.

The crisis-compelled easing of monetary policy will not be sustainable without a prompt and successful undertaking to break the impasse over fiscal policy. Its urgency could hardly have been signaled more forcefully than by the stock market's plunge. Yet federal spending sequestration under the Gramm-Rudman-Hollings provision would amount less to a credible compromise than to a demonstration of continuing failure of the political process. The kind of compromise that would most help market confidence requires a combination of revenue increases and spending cuts that is substantive on both scores and that, without overkill, yields rather more than the mandated minimum of $23 billion (0.5% of GNP) in deficit-reducing measures for the current year — and substantially more as economic conditions warrant in subsequent years. This would restrain domestic demand and release resources that a lower dollar, abetted by easier monetary policy, could channel into external adjustment. Such an approach, pursued consistently year by year, would rely on both income and price adjustments to avoid recession while bringing the current account deficit below $100 billion by 1990.

*Higher import prices raise the general U.S. price level, yielding a transitory hump in the rate of inflation — but not a continuing increase if unit costs stay in check. Over the past eighteen months, manufacturing unit labor costs have shown an absolute fall, since labor productivity rose 4.1% annually during the past three years and in the second quarter of 1987 reached 4.9%. If the productivity trend can be maintained or bettered, unit cost inflation need not spiral unless wage growth picks up a real head of steam.

Conclusions

A root cause of this fall's maelstrom in international bond and stock markets lies in the persistence of major global imbalances. Last February's Louvre accord led the markets to believe the imbalances were on course to correction based on policy fundamentals officially judged broadly consistent with exchange rate stability. That judgment has proven wanting. If current exchange rates hold, the United States will be lucky to maintain decent economic growth and simultaneously narrow its trade deficit more than $25 billion in 1988 from the $175 billion, CIF basis, now in store for 1987. Chronic deficits on this scale — more than 3.5% of GNP — are simply not acceptable. Their inconsistency with fixed exchange rates, given the failure of both surplus countries and the United States to achieve appropriate domestic demand conditions, has contributed mightily to the run-up in interest rates. Altogether, the Louvre accord has become a formula for world recession.

The slowness of trade and current account adjustment should be neither surprise nor mystery. The principal hindrance lies in the fact that the basic demand management policies of the major industrial countries

Table 11

G-3 economic adjustment

percent per annum, unless otherwise noted

	1986	1st half* 1987	1987	1988	Policy objective 1988-1990 avg.**
Domestic demand contribution					
United States	3.9	1.8	2.2	2.1	1.5
Japan	3.8	3.4	4.0	3.9	5.0
Germany	3.6	0.4	2.0	2.4	4.0
Exchange rates (average)					
Yen/$	168	148	144	125	115
DM/$	2.17	1.83	1.83	1.63	1.50
Net foreign contribution					
United States	—0.9	1.3	0.4	0.8	1.0
Japan	—1.3	0.0	—0.8	—0.7	—0.8
Germany	—1.1	—1.2	—0.5	—0.2	—1.0
Real GNP					
United States	2.9	3.1	2.6	2.9	2.5
Japan	2.5	3.4	3.2	3.2	4.2
Germany	2.5	—0.8	1.5	2.2	3.0
*Trade balance, CIF***					
United States	—160	—164	—175	—143	—77
Japan	93	96	96	85	62
Germany	52	61	60	59	30
*Current account balances****					
United States	—141	—156	—167	—152	—97
Japan	86	91	86	79	47
Germany	37	44	40	37	15

*Real GNP data, including components, are percent change from the preceding half year at seasonally adjusted annual rates.
**Trade and current account figures are for 1990, while other data are average for the period.
***$ billions.

have been too slow to shift into a posture supportive of adjustment and still do not measure up to the needed scale of adjustment. Thus, U.S. domestic demand grew 4% in the third quarter of 1987 and net external demand deteriorated. Yet, though U.S. fiscal discipline commands virtually unanimous praise as a principle, sustained follow-through is quite another matter as twilight steals over the incumbent Administration. Elsewhere, the budget stance was supercautious in Japan during 1985-86 and, notwithstanding this year's shift in plans, cannot be rated expansionary for the long haul. Germany's three-stage tax reduction is decidedly gradualist, and its design pays scant heed to external considerations. In addition, some other countries in Europe, heavily reliant on exports, are loath to part with their external surpluses. Thus the surplus countries have done little to boost their spending and the number-one deficit nation has dawdled on spending restraint.

At the same time, the adjustment potential of exchange rate changes has not come through in practice. Economic weakness abroad has limited the ability of U.S. exporters to sustain their foreign-currency selling prices — and thus boost their dollar earnings in line with the dollar's depreciation — and foreign suppliers have gone to extraordinary lengths to hold the line on their U.S. selling prices rather than pass through the dollar's depreciation to U.S. consumers. In short, both expenditure and price factors have tended to cripple adjustment so far, and under current policies are unlikely to yield significant progress in the future.

If policymakers are to reclaim influence over events, the Louvre accord requires a full and urgent rewrite. At United States behest, the G-7 has endorsed a profusion of indicators as bearing on the state of the world economy. These indicators now should be used in support of an explicit goal for correcting the principal global imbalance: specifically, to cut the U.S. trade deficit $100 billion, to the $70-$80 billion range or preferably lower, by 1990.

There are any number of ways by which this goal might be attained, but few that would do so while sustaining world economic growth. If both goals are to be reached, the number-one priority must be to get demand management policies in order. To make room for external improvement, the United States should

curb its domestic demand growth to the 1.5%-1.7% range — at least one-half percentage point less than the likely growth this year (see Table 11) — through fiscal restraint that exceeds the modest immediate goal of the Gramm-Rudman-Hollings edict. At the same time, Japan should shoot for domestic demand growth of at least 5% annually and Germany at least 4% — in both cases, growth rates markedly above what present policy intentions suggest; again, fiscal expansion is the preferred instrument.

Once demand policies are put right, it would be foolish to resist a further fall in the dollar as an aid to adjustment. However, it is an illusion to suppose that the U.S. trade deficit can be cured by driving down the dollar while procrastinating on the demand issue. If domestic demand growth is not reined back, currency depreciation in today's full-employment economy would breed little or no trade adjustment but build an inflation problem ultimately soluble only by recession. By contrast, if U.S. domestic demand is held in check, it becomes entirely sensible to let the dollar go lower. In that way, amplified by the increased exchange rate "pass-through" that renewed dollar decline should compel, price incentive would reinforce the income determinant of U.S. trade adjustment. The more that domestic demand paths can be tilted to favor external adjustment, in the surplus countries as importantly as in the United States, the less will adjustment need to rely on dollar depreciation.

In a world of integrated production and markets, the management of global imbalances and economic growth demands an international approach. Policymakers have responded by upgrading the G-7 forum, issuing pronouncements of impressive gravity, and sometimes adjusting policies at the margin, albeit largely as domestic considerations might warrant. But willingness to adjust domestic policies for global ends is rarely in evidence. Nationalism still rules. Its danger now is a rocky descent into protectionism, trade bilateralism (a factor in the otherwise commendable U.S. initiatives vis-à-vis Canada and Mexico), disintegration of global trade and financial markets, and impaired growth and living standards for the free world generally.

The markets have delivered the strongest possible message to the G-7. The Group's efforts at coordination for global growth and adjustment so far have been to little positive effect and lack credibility. For now, musings on gold, commodity prices, or nominal GNP targets are best left to academic research. Nor is pursuit of exchange rate stability for its own sake an appropriate endeavor. The real urgency lies in getting macroeconomic policy fundamentals right.

Statistical appendix

For key to data in tables see April 1987 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Netherlands	Spain	Switzerland	Denmark	Norway	Sweden
Nominal against 15 other industrial-country currencies																
1982	109.8	99.4	98.5	100.0	93.1	102.8	92.7	98.0	101.7	92.2	102.7	94.0	106.3	95.6	101.7	92.7
1983	114.2	100.8	107.7	91.9	87.3	107.5	90.3	91.5	103.6	90.0	105.0	78.4	111.4	96.4	99.4	82.1
1984	122.3	97.3	112.8	94.2	84.4	107.3	86.7	88.0	103.6	88.9	103.9	77.3	110.4	93.9	97.8	84.2
1985	126.9	92.8	115.7	76.3	85.4	107.8	92.1	88.1	104.2	89.5	104.0	75.5	109.5	95.0	95.6	83.8
1986	105.9	87.6	150.0	61.3	87.4	116.1	82.8	80.6	107.8	92.9	110.3	73.4	118.0	99.7	89.2	81.5
1987																
January	98.5	88.1	156.1	57.2	87.4	122.2	84.0	74.8	110.4	95.9	114.9	71.9	121.7	103.9	83.8	79.9
February	96.9	89.7	156.4	57.2	87.9	122.7	83.9	74.8	110.7	96.4	115.0	71.3	121.4	104.6	84.4	80.0
March	96.0	90.5	157.9	58.3	87.3	121.7	83.3	78.1	110.3	95.7	114.1	71.1	121.4	103.7	84.8	80.6
April	94.0	90.2	165.9	59.1	87.2	121.4	82.9	76.8	110.0	95.5	114.1	71.1	123.0	103.2	85.3	80.6
May	93.5	88.4	168.2	58.7	87.1	121.7	82.1	79.8	110.1	95.6	114.3	71.4	123.8	103.6	85.8	80.4
June	94.8	88.8	164.7	59.9	87.1	121.6	81.8	79.1	110.2	95.6	114.3	71.9	122.7	103.4	86.5	80.5
July	96.0	90.0	159.1	60.0	87.2	121.4	81.6	79.2	110.2	95.4	114.2	72.5	122.2	102.4	87.2	80.4
August	95.7	90.0	162.7	59.8	86.8	121.3	81.5	78.9	110.1	95.2	114.1	73.6	122.6	101.3	87.3	80.2
September	93.9	90.3	165.4	60.5	86.9	121.5	81.7	79.6	110.1	95.3	114.1	74.6	122.7	100.6	87.4	79.9
September 4	93.4	90.2	167.3	60.0	86.8	121.7	81.7	79.4	110.1	95.4	114.4	74.4	123.2	101.1	87.3	79.8
11	93.5	89.9	166.4	60.3	86.9	121.8	81.7	79.5	110.2	95.3	114.6	74.5	123.0	100.9	87.3	79.8
18	93.9	90.3	164.8	60.8	87.0	121.5	81.8	79.6	110.0	95.3	114.4	74.5	122.6	101.0	87.3	79.8
25	94.0	90.3	165.0	60.9	87.0	121.4	81.8	79.7	110.0	95.3	114.3	74.6	122.4	101.2	87.5	79.2
October 2	94.7	91.0	163.2	60.1	87.0	121.2	81.7	79.6	109.9	95.2	114.2	74.9	121.9	101.0	87.4	79.9
9	94.3	91.1	163.3	60.2	86.2	121.5	81.9	79.9	110.1	95.3	114.4	75.1	121.9	101.1	87.4	80.0
16	93.3	91.1	165.7	60.0	86.9	121.4	81.8	80.0	110.0	95.0	114.3	75.7	122.6	101.3	87.4	79.8
Real against 15 other industrial-country currencies																
1981	100.8	99.5	104.6	102.6	100.0	96.9	98.9	102.3	99.4	101.4	97.1	99.6	98.7	98.9	101.3	101.8
1982	109.3	100.6	92.3	105.7	97.2	99.9	98.5	98.6	101.2	91.8	100.5	98.9	102.9	97.9	103.2	95.5
1983	112.7	102.6	96.7	101.8	94.7	101.0	101.1	93.0	102.0	88.5	100.7	88.8	105.0	100.4	102.0	90.7
1984	119.5	100.2	97.6	106.4	97.0	98.0	101.8	90.1	103.0	85.8	97.8	91.0	100.0	99.2	100.5	95.9
1985	122.3	96.4	96.5	89.4	100.4	96.7	100.2	92.7	103.3	85.2	96.6	92.5	97.9	101.2	99.4	96.8
1986	101.4	93.4	119.1	78.8	103.8	103.3	102.6	87.2	106.6	84.8	101.4	95.3	105.6	107.5	97.0	95.9
1987																
April	90.5	96.5	126.3	81.3	105.6	105.9	103.6	86.9	108.8	84.8	105.3	95.0	110.2	111.9	99.8	95.5
May	89.9	95.1	127.5	80.8	105.3	106.1	103.4	88.3	108.6	84.2	105.3	95.4	110.7	113.1	100.9	95.0
June	91.2	95.6	124.8	82.7	105.4	105.9	103.1	87.6	110.0	84.3	104.6	95.9	109.3	112.5	101.1	95.5
July	92.6	96.9	120.7	83.8	105.8	105.9	102.6	87.8	111.4	83.4	102.9	97.0	108.7	111.3	102.1	95.6
August	92.2	97.2	123.6	84.4	105.3	105.7	102.7	87.4	109.9	83.2	103.0	96.7	109.2	110.1	103.3	95.7
September	90.0	98.1	125.0	86.4	106.0	105.4	102.8	88.2	110.1	83.1	104.5	100.0	109.4	109.8	104.8	95.4
Real against 18 other industrial-country and 22 LDC currencies																
1981	99.8	99.4	104.6	102.5	99.5	96.1	98.2	101.8	98.9	100.8	96.6	98.8	98.0	98.7	101.2	101.5
1982	109.6	101.7	93.9	105.2	96.9	99.4	98.1	98.4	101.1	91.5	99.5	98.9	102.8	97.7	102.9	95.3
1983	114.9	104.8	100.3	102.0	94.4	100.5	100.8	93.0	102.1	88.1	99.5	89.2	105.1	100.3	101.9	90.9
1984	120.7	102.7	102.3	106.7	96.4	96.8	101.0	89.6	102.6	85.0	95.8	91.2	99.7	99.0	100.5	95.7
1985	123.8	99.2	101.5	90.0	100.0	95.8	99.8	92.2	102.9	84.5	94.8	93.2	97.7	101.2	99.8	96.8
1986	107.0	94.5	123.9	80.7	104.4	104.5	104.0	88.0	107.4	85.1	101.3	97.9	107.4	108.0	97.8	96.7
1987																
April	97.2	96.7	130.5	83.2	106.8	108.2	106.2	88.6	110.3	85.8	106.3	98.6	113.1	112.8	100.8	96.8
May	96.3	95.2	131.5	82.7	106.6	108.5	106.0	90.0	110.2	85.5	106.4	99.0	113.6	114.1	102.1	96.6
June	97.3	95.8	128.8	84.4	106.5	108.2	105.6	89.2	111.5	85.5	105.5	99.4	112.1	113.4	102.1	96.8
July	98.5	97.3	124.7	85.0	106.9	108.0	105.0	89.4	112.9	84.5	103.7	100.5	111.4	112.2	103.1	96.8
August	98.1	97.5	127.8	85.7	106.3	107.7	105.0	88.9	111.3	84.2	103.7	102.2	112.0	111.0	104.3	96.9
September	95.7	98.1	128.5	87.5	107.0	107.5	105.1	89.8	111.5	84.2	105.2	103.5	112.1	110.7	105.7	96.6

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1981	107.1	103.2	108.0	100.6	113.9	103.3	99.7	98.9	99.8	100.3	99.4	101.2	102.0	101.8	99.2	104.5
1982	76.6	112.8	97.0	105.9	82.2	104.5	110.2	101.6	111.7	101.9	105.6	106.7	100.8	96.6	108.6	95.8
1983	71.2	85.9	89.1	104.9	78.5	98.3	117.2	95.7	93.2	97.6	113.9	96.1	101.8	94.6	120.7	93.3
1984	79.8	85.6	89.9	99.6	91.3	105.7	85.9	100.2	95.9	96.5	119.6	107.8	102.4	97.1	119.4	91.0
1985	70.9	84.9	79.4	85.6	90.0	96.3	93.0	104.1	94.7	89.1	116.3	114.5	95.6	94.6	106.5	91.3
1986	60.7	74.3	68.4	67.7	64.7	93.7	85.7	94.9	71.6	75.7	94.5	90.2	80.2	88.7	100.7	71.0
1987																
January	58.2	75.9	65.6	65.5	60.8	107.7	49.9	91.0	56.0	74.1	89.5	87.6	76.4	88.4	94.5	63.7
February	55.5	71.7	66.1	65.7	61.2	110.9	53.5	90.4	56.0	73.7	89.9	84.9	74.7	88.7	93.2	63.3
March	53.3	71.2	66.6	64.9	62.0	112.8	56.9	91.5	55.1	73.7	90.1	84.5	74.2	89.2	94.4	64.1
April	53.1	75.4	65.9	63.9	62.1	115.4	57.6	90.6	53.6	73.5	90.0	83.8	73.1	89.6	94.9	63.4
May	53.1	75.7	66.0	63.2	63.0	118.2	55.9	90.7	53.8	74.1	89.5	84.0	73.3	92.0	94.8	62.9
June	53.6	75.5	65.6	63.1	65.1	121.7	57.9	92.3	54.7	75.4	89.8	86.4	73.8	94.8	96.7	63.0
July	53.5	73.1	65.8	63.6	68.4	131.5	58.6	91.5	56.1	76.6	91.0	88.8	74.5	95.9	97.4	62.8
August	54.7	71.4	67.3	63.6	67.7	140.8	58.7	91.5	55.9	76.4	90.9	86.5	74.4	98.0	98.3	62.4
September	53.3	80.1	65.8	63.3	68.3	146.9	58.6	92.5	57.4	76.0	89.9	86.9	73.4	96.4	98.2	60.0

International banking market size

at end of period, billions of dollars

	1982	1983	1984	1985	1986				1987
					Mar	Jun	Sep	Dec	Mar
Gross claims									
Eurocurrencies, on residents and nonresidents	**2 146**	**2 253**	**2 359**	**2 833**	**2 947**	**3 040**	**3 347**	**3 560**	**3 811**
On nonbanks	634	665	694	822	854	875	914	938	995
On banks	1 512	1 588	1 665	2 011	2 093	2 165	2 433	2 622	2 817
In dollars	1 694	1 797	1 894	2 101	2 138	2 166	2 381	2 534	2 602
In other currencies	452	456	465	732	809	874	966	1 025	1 209
Domestic currencies, on nonresidents	**398**	**402**	**402**	**506**	**535**	**578**	**633**	**672**	**721**
On nonbanks	132	140	142	187	186	201	211	209	229
On banks	266	262	260	319	349	377	422	463	492
In dollars	211	221	215	215	203	210	219	227	206
In other currencies	187	181	187	291	332	368	414	445	515
Total	**2 544**	**2 655**	**2 761**	**3 339**	**3 482**	**3 618**	**3 980**	**4 232**	**4 532**
On nonbanks	766	805	836	1 009	1 040	1 076	1 125	1 147	1 224
On banks	1 778	1 850	1 925	2 330	2 442	2 542	2 855	3 085	3 309
In dollars	1 905	2 018	2 109	2 316	2 341	2 376	2 600	2 761	2 808
In other currencies	639	637	652	1 023	1 141	1 242	1 380	1 470	1 724
Gross liabilities									
Eurocurrencies, to residents and nonresidents	**2 168**	**2 278**	**2 386**	**2 846**	**2 964**	**3 059**	**3 384**	**3 579**	**3 851**
To nonbanks	432	479	497	585	610	632	660	685	740
To official monetary institutions	91	88	96	112	106	109	110	109	125
To other banks	1 645	1 711	1 793	2 149	2 248	2 318	2 614	2 786	2 986
In dollars	1 741	1 846	1 950	2 147	2 166	2 204	2 425	2 553	2 648
In other currencies	427	432	436	699	798	855	959	1 026	1 203
Domestic currencies, to nonresidents	**250**	**260**	**280**	**377**	**394**	**418**	**464**	**494**	**556**
To nonbanks	70	73	80	114	121	121	121	116	134
To banks	180	187	200	263	273	297	343	377	422
In dollars	116	135	148	169	166	171	191	192	192
In other currencies	134	125	134	208	228	247	273	302	364
Total	**2 418**	**2 538**	**2 666**	**3 223**	**3 358**	**3 477**	**3 848**	**4 073**	**4 407**
To nonbanks	502	552	577	699	731	753	781	801	874
To banks and official institutions	1 916	1 986	2 089	2 524	2 627	2 724	3 067	3 272	3 533
In dollars	1 857	1 981	2 096	2 316	2 332	2 375	2 616	2 745	2 840
In other currencies	561	557	570	907	1 026	1 102	1 232	1 328	1 567
Net market size	**1 285**	**1 382**	**1 430**	**1 676**	**1 735**	**1 800**	**1 912**	**1 979**	**2 023**

International bond issues and bank credits

millions of dollars

	1984	1985	1986	1987			Jan-Aug	
				Jun	Jul	Aug	1987	1986
By country of borrower								
Industrial countries	**177 077**	**226 711**	**270 231**	**17 825**	**23 225**	**15 277**	**159 701**	**174 119**
Australia	5 816	14 407	20 106	1 157	2 150	305	8 491	10 609
Austria	2 254	2 435	3 581	305	212	418	2 909	2 499
Belgium	1 847	3 269	4 952	430	395	601	3 480	3 585
Canada	13 124	17 184	21 633	1 386	806	206	6 772	12 770
Denmark	4 825	3 589	9 633	246	142	78	3 969	4 603
Finland	1 713	1 846	3 445	151	110	244	2 472	2 024
France	11 298	18 773	19 701	604	784	436	9 069	12 394
Germany	2 165	3 452	11 927	737	1 213	1 183	9 050	7 958
Greece	1 551	1 587	1 317	166	—	158	834	902
Ireland	1 377	1 881	4 179	130	85	80	1 233	3 208
Italy	6 933	11 033	12 962	810	1 192	200	5 476	9 486
Japan	17 526	21 269	35 508	4 125	6 592	5 262	33 685	22 011
Netherlands	1 973	2 299	3 579	789	896	—	3 843	2 288
New Zealand	3 208	2 707	8 078	275	228	308	3 379	4 683
Norway	1 324	3 905	6 644	292	205	429	4 281	4 274
Portugal	1 796	2 382	2 433	336	589	—	1 891	2 130
South Africa	1 422	825	—	—	—	—	—	—
Spain	4 931	3 913	7 015	139	98	—	994	4 205
Sweden	11 256	9 890	8 020	765	405	137	4 196	6 248
United Kingdom	8 899	25 424	24 295	1 136	1 492	959	19 205	14 914
United States	65 054	69 193	56 774	3 287	4 432	3 087	29 275	40 385
*Other**	6 785	5 447	4 448	555	1 200	1 182	5 195	2 942
Developing countries	**39 725**	**32 139**	**24 317**	**1 549**	**2 445**	**2 598**	**21 810**	**16 336**
Latin American countries	**17 464**	**8 115**	**3 192**	**66**	**191**	**1 950**	**10 732**	**1 795**
Argentina	4 212	3 700	17	—	—	1 950	1 950	17
Brazil	6 649	—	219	—	—	—	—	—
Chile	784	1 085	—	—	—	—	—	—
Colombia	589	1 052	89	—	—	—	50	89
Mexico	3 918	109	313	—	—	—	7 700	50
Venezuela	—	48	—	—	30	—	30	—
*Other***	1 312	2 121	2 554	66	161	—	1 002	1 639
Asian countries	**15 893**	**18 410**	**15 291**	**1 000**	**2 054**	**648**	**8 968**	**10 460**
India	945	818	1 721	55	628	25	1 458	844
Indonesia	1 924	451	1 358	215	25	35	895	1 008
Korea	6 201	5 898	3 134	174	375	242	2 113	2 606
Malaysia	2 605	2 219	1 328	83	113	—	363	762
Philippines	925	925	—	—	—	—	—	—
Thailand	1 221	1 497	1 401	—	66	38	273	1 044
Other	2 072	6 602	6 350	473	847	308	3 866	4 196
Middle Eastern and African countries	**6 368**	**5 613**	**5 834**	**483**	**200**	**—**	**2 110**	**4 081**
Algeria	821	1 450	1 344	87	—	—	241	996
Nigeria	985	—	—	—	—	—	—	—
Turkey	741	1 203	2 637	370	200	—	1 423	1 522
Other	3 821	2 960	1 853	26	—	—	446	1 563
Eastern European countries	**3 244**	**5 236**	**4 091**	**100**	**652**	**—**	**2 409**	**3 308**
Hungary	1 386	1 577	1 315	—	400	—	1 114	1 149
Soviet Union	1 051	1 489	1 821	—	32	—	694	1 298
*Other****	807	2 169	955	100	220	—	600	860
International organizations****	**13 287**	**20 635**	**18 916**	**1 372**	**2 770**	**1 026**	**13 163**	**12 041**
By type of instrument and currency								
International bond issues	**107 411**	**167 756**	**226 393**	**14 137**	**20 260**	**14 376**	**136 208**	**148 732**
Eurobonds	79 458	136 731	187 952	12 176	16 449	10 925	113 649	125 370
U.S. dollar	63 593	97 782	118 220	5 104	9 303	7 887	48 995	77 449
German mark	4 604	9 491	16 870	834	1 214	520	11 378	12 650
British pound	3 997	5 766	10 510	1 272	1 236	648	11 314	8 462
Japanese yen	1 212	6 539	18 673	2 583	444	185	17 774	10 889
European composite units	3 032	7 038	6 965	693	335	389	5 985	5 074
Other	3 020	10 114	16 713	1 689	3 916	1 296	18 203	10 846
Foreign bonds	27 953	31 025	38 441	1 962	3 811	3 451	22 559	23 362
U.S. dollar	5 487	4 655	6 064	—	300	50	2 100	2 814
German mark	2 243	1 741	—	—	—	—	—	—
British pound	1 292	958	322	—	—	—	—	321
Swiss franc	12 626	14 954	23 401	1 512	3 157	2 707	16 166	14 636
Japanese yen	4 628	6 379	4 756	209	66	297	2 089	3 362
Other	1 677	2 339	3 898	241	288	397	2 204	2 227
International bank credits	**125 922**	**116 964**	**91 164**	**6 709**	**8 833**	**4 525**	**60 874**	**57 072**
Eurocurrency credits	112 605	110 317	82 755	5 830	7 078	3 608	54 161	51 909
Foreign credits	13 317	6 647	8 409	879	1 755	917	6 713	5 163
Total	**233 333**	**284 720**	**317 556**	**20 846**	**29 093**	**18 901**	**197 082**	**205 804**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

	1984	1985	1986	1987						
	Dec	Dec	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep
Eurodollar										
overnight	8.63	12.25	22.00	6.25	6.50	6.69	6.44	6.62	6.81	6.25
one month	8.38	8.00	6.50	6.44	6.69	7.12	6.94	6.75	7.12	7.75
three months	8.63	7.88	6.25	6.50	7.00	7.25	7.06	7.00	7.19	8.37
six months	9.13	7.88	6.12	6.56	7.25	7.44	7.25	7.25	7.44	8.50
twelve months	9.81	7.94	6.12	6.69	7.62	7.94	7.62	7.69	7.94	9.00
Euro-Canadian dollar										
one month	9.88	9.00	8.00	6.87	7.37	7.87	8.06	8.94	9.12	9.19
three months	10.81	9.00	8.12	6.87	8.25	8.12	8.19	9.12	9.25	9.69
six months	10.06	9.00	8.19	6.94	8.62	8.44	8.37	9.56	9.62	10.19
twelve months	10.44	9.00	8.31	7.06	8.87	8.87	8.69	9.87	10.00	10.69
Euro-French franc										
one month	10.69	12.50	10.12	8.19	8.12	8.00	8.06	7.81	7.81	7.81
three months	10.69	13.00	10.37	8.25	8.25	8.19	8.37	8.12	8.19	8.31
six months	11.00	13.13	9.75	8.31	8.31	8.37	8.56	8.56	8.81	8.69
twelve months	11.38	12.25	8.75	8.31	8.50	8.62	9.00	9.12	9.31	9.19
Euromark										
one month	5.50	4.75	5.12	3.87	3.81	3.75	3.62	3.87	4.00	4.12
three months	5.50	4.75	4.87	3.87	3.81	3.75	3.81	3.94	4.06	4.56
six months	5.56	4.75	4.81	3.87	3.87	3.75	3.81	4.12	4.31	4.75
twelve months	5.56	4.81	4.81	4.00	4.00	3.87	3.87	4.00	4.44	4.81
Euro-Dutch guilder										
one month	5.69	5.75	6.31	5.31	5.19	5.06	5.19	5.25	5.19	5.25
three months	5.75	5.75	6.00	5.31	5.19	5.06	5.19	5.31	5.31	5.56
six months	5.81	5.81	5.87	5.31	5.19	5.12	5.19	5.37	5.37	5.62
twelve months	5.94	5.88	5.81	5.31	5.19	5.12	5.19	5.44	5.50	5.75
Euro-Swiss franc										
one month	4.44	3.88	3.94	3.25	3.25	4.25	3.69	3.62	3.94	3.69
three months	4.56	4.00	3.94	3.69	3.69	3.87	3.81	3.81	3.75	4.37
six months	4.63	4.00	3.87	3.69	3.69	3.87	3.81	3.94	4.00	4.37
twelve months	4.69	4.06	3.87	3.75	3.81	3.87	3.87	4.00	4.06	4.37
Eurosterling										
one month	9.50	11.69	11.12	10.00	9.44	8.87	9.12	9.00	10.00	10.19
three months	9.88	11.81	11.12	9.81	9.25	8.81	9.19	9.44	10.50	10.37
six months	10.00	11.81	11.06	9.69	9.12	8.81	9.19	9.69	10.75	10.50
twelve months	10.19	11.69	11.06	9.62	9.12	9.06	9.31	10.06	11.00	10.69
Euroyen										
one month	6.19	7.13	4.56	3.94	3.94	4.00	3.81	3.62	4.00	4.37
three months	6.19	6.56	4.50	4.00	3.94	3.87	4.00	4.06	4.06	5.00
six months	6.13	6.50	4.37	4.00	3.87	3.87	4.00	4.12	4.19	5.19
twelve months	6.13	6.38	4.31	4.00	3.94	3.94	4.06	4.25	4.31	5.25
European currency unit										
one month	9.25	9.63	8.56	7.16	6.94	6.69	6.56	6.62	6.75	6.87
three months	9.38	9.63	8.44	7.16	6.94	6.87	6.75	6.19	7.00	7.37
six months	9.50	9.63	8.06	7.16	7.00	7.00	6.94	6.94	7.25	7.56
twelve months	9.63	9.63	7.31	7.19	7.19	7.12	7.12	7.12	7.37	7.68

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years at or near end of month

	1985	1986	1987							
	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States companies										
Eurodollar	9.68	8.67	8.71	8.78	9.53	9.78	10.11	9.82	9.99	10.95
Euromark	6.73	6.62	6.60	6.56	6.59	6.57	6.65	7.04	6.82	6.87
Swiss franc	5.49	5.70	5.64	5.68	5.55	5.52	5.50	5.57	5.43	5.50
European governments										
Eurodollar	10.52	9.91	10.03	10.08	11.00	11.24	11.14	11.22	11.41	11.81
Euromark	7.03	6.77	6.70	6.50	6.33	6.35	6.36	6.55	6.65	6.76
Swiss franc	4.91	4.51	4.35	4.37	4.27	4.34	4.33	4.33	4.38	4.39
European currency unit	10.23	10.20	10.37	10.26	13.07	10.32	10.51	10.40	10.43	10.46

Central bank discount rates

at or near end of month

	1984	1985	1986	1987					Current	
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct 21 1987	effective since
United States	8.00	7.50	5.50	5.50	5.50	5.50	5 50	6 00	6.00	Aug 24, 87
Canada	10.09	9.49	8.47	8.44	8.54	9.22	9.24	9.57	9.83	Oct 15, 87
Austria	4.50	4.00	4 00	3.50	3.50	3.50	3 50	3.50	3.50	Jan 23, 87
Belgium	11.00	9.75	8.00	7.75	7.50	7.25	7 25	7.25	7.25	Jul 23, 87
Denmark	7.00	7.00	7.00	7.00	7.00	7.00	7 00	7.00	7.00	Oct 27, 83
Finland	9.50	9.00	7.00	7.00	7.00	7.00	7 00	7.00	7.00	May 19, 86
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	4.50	4.00	3.50	3.00	3.00	3 00	3.00	3.00	3.00	Jan 23, 87
Ireland	14.00	10.25	13.25	11.75	11.25	10.25	10 25	9 75	9 75	Sep, 87
Italy	16.50	15.00	12.00	11.50	11.50	11.50	12 00	12 00	12.00	Aug 28, 87
Netherlands	5.00	5.00	4.50	4.50	4.50	4.50	4.50	4.50	4.50	Mar 7, 86
Portugal	25.00	19.00	16.00	15.00	15.00	15.00	15.00	15 00	15.00	Mar 23, 87
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8 00	8 00	8.00	Jul 26, 77
Sweden	9.50	10.50	7.50	7.50	7.50	7 50	7 50	7.50	7.50	Sep 19, 86
Switzerland	4.00	4.00	4.00	3.50	3.50	3 50	3.50	3 50	3.50	Jan 22, 87
United Kingdom	9.38	11.31	10.81	8.87	8.87	8.87	9.87	9.87	9.87	Aug 7, 87
Japan	5.00	5.00	3.00	2.50	2.50	2.50	2 50	2.50	2.50	Feb 23, 87
New Zealand	13.50	19.80	24 60	21 35	20 00	19 20	18 55	n a.	n.a.	Aug, 87
South Africa	21.75	13.50	10.00	10.00	10.00	10.00	10 00	10.00	10.00	Dec 10, 86
Argentina*	18.19	5.00	11.19	9.00	10.50	12.80	15.20	15.70	n.a.	Sep, 87
Korea	5.00	5.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Jul 10, 86
Philippines	12.11	11.50	9.64	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	Feb, 87
Singapore	6.75	5.00	5 00	5.00	5.00	5 00	5 00	5 00	5.00	Jul, 85
Thailand	12.00	11.00	8 00	8.00	8.00	8.00	8 00	8 00	8.00	Sep 1, 86
Venezuela	11.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	Mar, 85

*Percent per month.

Day-to-day money rates

monthly averages

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	8.38	8.27	6.71	6.10	6 13	6.35	6.85	6 72	6 58	6.82	7.21
Canada	10.50	9.23	8.28	7 22	7.16	7.10	7.41	8.35	8.53	9.72	8.80
Austria	7.63	7.25	7.62	4.25	4 12	4.25	3.80	3.95	4.10	4.10	4.12
Belgium	9.12	6 60	5.09	6 90	5.83	5.65	5.41	5 42	5.62	4.82	5.24
Finland	15.07	11.96	11 97	11.76	11 44	11.14	11.00	11.00	11.00	11.00	11.00
France	10.95	9 02	7.80	8.36	7.69	7.91	8.02	8 01	7.46	7.41	7.19
Germany	5.62	4.64	5 00	3.83	3.84	3.75	3.69	3.61	3.73	3.78	3.71
Ireland	14.50	9.62	13 00	13 94	13 75	13.25	12.00	11.00	9 00	8.25	8.75
Italy	17.25	14.75	11.42	11.81	11 22	10.56	10.25	10.78	10 95	11.09	11.70
Netherlands	5.60	5.75	6.19	5.31	5 56	5.19	5.20	5.19	5.19	4.84	4.75
Norway	12.50	12.50	14.00	14.00	14.00	14.00	14 00	14 00	n a	n.a.	n.a.
Spain	12 18	9 92	11.76	12.47	14 43	17.32	20.18	18.12	18 09	17 68	17.45
Sweden	11.88	11.83	8.89	11.73	12.02	8.70	8 71	8 22	8.61	8 50	n.a.
Switzerland	1.50	2.00	1.12	1.00	1.00	1.75	1.37	2.25	2 00	1.50	1.37
United Kingdom	6.31	9.72	9.19	10.68	10.30	9.61	8.78	9.16	8.78	9.12	9.72
Australia	10.98	18.37	15.40	16 22	16 14	14.71	13.45	12.79	12 08	11.90	11.58
Japan	6.41	8.02	4.18	4 05	3.85	3.52	3.16	3 16	3.17	3 20	3 25
South Africa	21.13	12.50	8.50	8.50	8.37	8.31	8.37	8.00	8 56	n.a.	8.45
Argentina*	17.75	4.50	7.00	4.00	5.32	5.50	6.00	8.00	9 00	11.17	12.50
Brazil	272.02	352.23	83.05	412.00	406.00	853.00	n.a.	n.a.	n a.	n.a.	n.a.
Hong Kong	6.80	6.10	3 90	1.97	3 76	4.11	4.20	6.45	5 33	5.54	3.67
Korea	10.00	8.80	9 00	8 60	8 80	8.40	8.50	8.90	8 90	n.a.	n.a.
Philippines	15.22	15.03	n.a.	6.44	13.79	13.29	n.a.	n.a.	n a.	n.a.	n.a.
Singapore	6.01	4.53	3.51	3.22	2 24	3.31	4.39	2.57	3 33	2.91	2.52
Taiwan	8.07	4.50	3.00	3.25	3.10	3.50	3.50	3.50	5.50	n.a.	n.a.

*Percent per month.

Treasury bill rates

bond equivalent yields, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	7.99	7.25	5.73	5.48	5.76	5.61	5.82	5.90	6.11	6.41	6.82
Canada	9.84	9.24	8.22	7.28	6.80	8.08	8.19	8.29	8.97	8.99	9.32
Belgium	10.90	9.89	7.50	7.86	7.50	7.35	7.15	6.84	6.74	6.74	6.74
Ireland	15.10	11.15	13.60	13.67	13.51	11.29	10.86	10.46	9.56	9.93	8.93
Italy	14.69	13.10	10.00	9.74	9.66	9.60	9.60	9.60	10.53	10.92	n.a.
Netherlands	5.39	5.69	6.37	5.87	5.44	5.31	5.31	4.75	5.25	5.62	n.a.
Spain	12.27	9.52	8.37	7.67	n.t.	9.61	10.40	9.59	8.61	7.10	6.73
Sweden	11.83	12.49	9.20	10.80	10.31	9.25	9.16	8.60	9.11	9.25	n.a.
United Kingdom	9.33	11.49	10.79	10.46	9.54	9.39	8.68	8.96	9.14	10.12	10.02
Australia	12.27	19.40	14.91	16.32	15.47	14.00	13.01	12.23	12.04	11.91	11.09
Japan	4.91	4.91	2.89	2.89	2.38	2.38	2.38	2.38	2.38	2.38	2.38
New Zealand	13.50	17.62	19.69	25.38	24.70	25.29	19.48	18.40	n.t.	19.38	n.t.
South Africa	21.94	12.99	8.84	8.78	8.26	8.60	8.96	8.64	8.74	8.70	8.72
Brazil	273.03	379.77	149.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	48.67	72.98	104.03	104.83	100.66	99.01	98.60	98.40	96.86	n.a.	n.a.
Philippines	47.14	16.45	n.a.	7.71	11.76	11.80	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	2.91	2.94	2.10	1.67	1.93	2.12	2.61	2.63	2.97	3.01	3.26

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	8.34	8.01	6.04	6.24	6.70	6.98	7.12	7.10	6.98	7.10	7.94
Canada	10.00	9.40	8.35	7.40	6.90	8.15	8.30	8.45	9.20	9.15	9.25
Belgium	10.85	9.89	7.60	7.81	7.50	7.40	7.30	7.00	6.84	6.79	6.79
France	10.69	9.12	8.37	8.25	7.87	8.00	8.12	8.25	7.87	7.81	7.87
Germany	5.75	4.80	4.85	3.85	3.85	3.80	3.65	3.65	3.85	3.85	4.55
Ireland	15.13	12.00	14.06	14.25	13.37	10.87	11.19	10.50	9.87	9.94	9.94
Italy	16.88	15.13	11.37	11.12	10.12	10.00	10.50	11.00	11.12	12.37	12.37
Netherlands	5.75	5.75	6.19	5.50	5.55	5.31	5.25	5.25	5.37	5.25	5.38
Portugal	24.57	20.71	16.07	14.94	14.95	14.96	14.90	15.05	15.07	15.09	n.a.
Spain	12.21	10.51	11.79	12.60	14.60	17.09	19.80	18.29	17.56	16.83	16.86
Switzerland	5.00	4.75	4.50	4.00	3.87	3.75	3.87	3.81	3.94	3.75	4.25
United Kingdom	9.88	12.75	11.25	10.19	10.06	9.25	9.00	9.25	9.44	10.31	10.19
Australia	12.90	19.75	15.10	16.60	16.25	14.50	13.80	13.35	12.40	12.50	11.25
Japan	6.33	7.03	4.34	3.96	3.98	3.69	3.70	3.73	3.74	3.71	3.84
New Zealand	15.00	20.00	24.25	25.15	25.60	25.70	20.35	18.75	18.70	18.30	18.90
South Africa	22.78	13.35	8.55	9.05	8.40	9.10	9.00	8.80	8.80	8.85	8.90
Chile	20.68	22.42	19.56	25.34	23.87	22.42	28.32	14.03	18.16	25.34	26.82
Hong Kong	8.25	6.50	4.62	4.37	4.87	5.50	6.25	6.87	6.19	6.56	6.37
Indonesia	19.00	15.00	19.50	16.00	17.00	16.50	18.00	27.00	n.a.	20.50	18.75
Korea	8.00	8.00	8.00	8.00	8.00	8.00	7.50	7.50	7.50	7.50	n.a.
Malaysia	10.30	8.20	6.00	3.30	2.60	2.70	2.80	2.75	n.a.	n.a.	n.a.
Philippines	33.21	14.61	8.31	7.05	8.72	10.05	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	7.00	5.88	3.94	3.31	3.26	3.73	4.44	4.31	4.13	n.a.	n.a.
Taiwan	7.85	4.10	3.87	3.67	3.56	3.57	3.48	4.36	4.72	n.a.	n.a.
Thailand	12.00	15.50	7.75	7.75	7.75	7.75	7.75	7.75	n.a.	n.a.	n.a.

Commercial bank deposit rates

at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	8.35	7.75	6.30	6.13	6.30	6.80	7.05	6.90	6.77	6.95	8.05
Canada	10.05	9.40	8.15	7.40	7.00	8.25	8.45	8.50	9.25	9.20	9.60
Austria	7.50	6.50	5.50	4.75	4.50	4.37	4.15	4.15	4.25	4.30	4.60
Belgium	10.63	9.63	7.44	7.69	7.37	7.19	7.00	6.56	6.19	6.52	6.56
Denmark	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Finland	5.25	4.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
France	7.04	6.12	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	n.a.
Germany	5.25	4.40	4.80	3.90	3.95	3.95	3.85	3.75	3.75	3.75	3.90
Ireland	14.63	11.87	13.75	14.00	13.25	10.75	11.00	10.25	9.62	9.87	9.00
Italy	11.64	13.21	10.69	10.08	9.88	9.75	10.53	n.a.	n.a.	n.a.	n.a.
Netherlands	5.69	5.81	6.06	5.37	5.37	5.25	5.12	5.12	5.25	5.25	5.50
Norway	12.75	12.00	15.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	28.00	20.00	n.a.	15.00	14.50	14.50	14.50	14.50	14.50	14.50	14.50
Spain	11.64	9.64	8.67	8.57	8.58	8.60	8.77	8.98	9.04	9.21	9.22
Sweden	11.45	12.18	9.93	11.00	10.75	9.75	10.00	9.00	9.25	9.70	n.a.
Switzerland	4.50	4.50	4.25	3.75	3.62	3.50	3.62	3.56	3.69	3.50	4.00
United Kingdom	9.88	11.75	11.19	10.59	9.84	9.25	8.81	9.25	9.31	10.12	10.00
Australia	12.75	18.80	15.56	16.62	16.19	15.21	14.42	13.85	13.41	12.67	12.14
Japan	6.38	7.04	4.55	4.17	4.20	4.11	3.88	3.99	4.09	4.10	4.45
New Zealand	15.25	19.98	23.50	23.70	23.30	23.85	20.00	18.40	18.35	18.40	18.75
South Africa	22.88	13.20	8.65	9.25	8.75	9.15	9.25	9.00	9.00	9.00	9.35
*Argentina**	31.23	5.40	8.41	4.43	4.86	7.17	7.81	7.96	10.24	12.20	18.20
*Brazil***	27.00	18.00	220.00	32.00	30.00	24.00	n.a.	n.a.	n.a.	n.a.	n.a.
Chile	20.68	23.60	20.98	27.42	24.31	25.93	18.00	17.00	17.74	25.05	26.83
Hong Kong	8.25	6.50	4.62	4.37	4.87	5.50	6.25	6.87	6.19	6.56	6.37
Korea	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Malaysia	9.58	7.00	6.33	4.66	2.33	2.43	2.35	2.42	n.a.	n.a.	n.a.
Mexico	47.45	72.90	94.30	94.30	94.30	94.30	94.30	94.30	94.30	n.a.	n.a.
Philippines	31.01	12.34	n.a.	6.68	6.13	7.96	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	6.13	5.26	3.63	3.32	3.32	3.63	4.88	4.38	4.25	n.a.	n.a.
Taiwan	6.50	5.25	4.00	4.00	4.00	4.00	4.00	4.00	4.00	n.a.	n.a.
Thailand	13.00	10.50	6.75	6.75	6.75	6.75	n.a.	n.a.	n.a.	n.a.	n.a.
Venezuela	12.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	n.a.

*Percent per month.

Domestic government bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	11.61	9.49	7.79	7.48	7.81	8.45	8.65	8.50	8.88	9.18	9.80
Canada	11.66	10.04	9.23	9.10	8.98	9.82	9.92	9.78	10.23	10.44	11.16
Austria	8.03	7.81	7.33	7.05	6.93	6.86	6.74	6.61	6.68	6.83	7.00
Belgium	11.56	9.60	7.70	7.57	7.64	7.66	7.76	7.82	7.64	7.93	8.25
Denmark	14.60	9.67	11.04	11.48	10.56	13.09	13.03	10.09	11.57	13.02	12.33
Finland	10.73	10.58	7.80	7.82	7.89	7.77	7.88	7.85	7.86	7.87	7.83
France	12.70	11.33	9.89	9.84	9.42	9.51	9.86	10.40	10.39	10.60	n.a.
Germany	7.17	6.57	6.25	6.26	6.12	5.98	5.99	6.31	6.39	6.59	6.86
Ireland	14.90	11.84	12.97	12.41	11.16	10.47	10.92	10.93	11.81	11.92	11.30
Italy	14.52	13.66	10.05	9.84	10.03	10.08	10.20	10.41	10.90	11.30	n.a.
Netherlands	7.72	6.96	6.40	6.15	6.22	6.12	6.07	6.26	6.43	6.66	6.81
Norway	12.00	13.00	13.24	13.03	13.20	12.96	13.08	13.11	13.00	13.00	n.a.
Portugal	22.23	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	13.93	12.52	10.36	10.59	10.95	12.04	13.43	13.29	13.56	13.75	14.26
Sweden	12.04	12.11	10.66	11.23	10.70	11.07	11.77	11.37	11.79	11.92	n.a.
Switzerland	4.60	4.42	4.05	4.01	4.04	4.03	4.07	4.02	3.98	4.06	4.32
United Kingdom	10.25	10.35	10.17	9.51	9.15	8.87	8.79	9.15	9.69	9.93	9.85
Australia	13.50	14.85	13.40	14.00	13.45	13.05	13.00	12.80	12.95	12.95	12.50
Japan	6.47	5.92	4.61	3.96	3.72	3.42	3.38	3.91	4.44	4.43	5.72
New Zealand	16.90	17.00	16.00	16.80	16.30	15.95	15.65	15.45	15.80	15.65	15.45
South Africa	16.55	18.09	15.06	15.30	14.66	15.30	15.70	15.60	15.18	14.98	15.12
Philippines	18.54	n.t.	n.t.	n.t.	n.t.	n.t.	n.a.	n.a.	n.a.	n.a.	n.a.
Venezuela	14.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	n.a.

Commercial bank lending rates to prime borrowers

at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	10.75	9.50	7.50	7.50	7.50	7.75	8.25	8.25	8.25	8.25	8.75
Canada	11.25	10.00	9.75	9.25	8.75	9.25	9.50	9.50	9.50	10.00	10.00
Austria	9.25	9.00	9.00	8.75	8.75	8.75	8.75	8.50	8.50	8.50	8.50
Belgium	14.00	11.50	9.75	10.25	9.75	9.75	9.25	9.25	8.75	8.75	8.75
Denmark	10.50	8.50	8.00	10.00	10.00	10.00	10.00	9.50	9.50	9.50	9.50
Finland	10.68	10.37	8.81	8.80	8.84	8.86	8.89	8.91	8.93	8.94	n.a.
France	12.00	10.60	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
Germany	7.75	7.25	6.75	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Ireland	15.75	12.50	15.75	15.75	15.75	15.25	14.25	13.75	12.75	12.75	12.00
Italy	18.00	15.88	13.00	13.00	12.50	12.50	12.50	12.50	12.50	13.00	13.00
Netherlands	6.25	6.25	7.12	5.75	5.87	5.75	5.62	5.62	5.62	5.62	5.62
Norway	13.00	12.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	29.00	22.50	17.50	17.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Spain	15.84	14.75	14.22	14.24	14.57	15.23	16.21	16.51	16.62	16.61	16.69
Sweden	14.50	15.05	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	n.a.
Switzerland	6.00	6.00	5.75	5.25	5.25	5.00	5.00	5.00	5.00	5.00	5.00
United Kingdom	9.50	11.50	11.00	11.00	10.00	9.50	9.00	9.00	9.00	10.00	10.00
Australia	14.00	21.00	18.50	18.50	18.50	17.50	16.75	16.25	15.75	15.25	14.45
Japan	5.50	5.50	3.75	3.75	3.37	3.37	3.37	3.37	3.37	3.37	3.37
New Zealand	14.00	21.00	18.50	25.00	27.00	29.00	22.50	22.00	21.00	19.00	20.00
South Africa	24.00	16.50	12.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Argentina*	32.05	7.30	11.30	5.45	5.71	9.20	8.50	9.65	13.20	15.90	20.00
Brazil**	31.00	19.00	250.00	45.00	40.00	37.00	n.a.	n.a.	n.a.	n.a.	n.a.
Chile	60.82	33.34	29.13	36.07	34.48	36.07	40.27	30.91	27.11	31.66	33.12
Hong Kong	11.00	7.00	6.50	5.00	6.00	6.50	6.50	7.50	7.50	7.50	7.50
Indonesia	23.50	18.75	19.75	19.50	19.50	19.25	19.75	26.00	26.00	23.00	22.00
Korea	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Malaysia	12.00	10.50	10.00	9.00	9.00	8.50	8.50	7.75	7.25	n.a.	n.a.
Mexico	47.54	65.66	95.33	96.20	96.25	95.79	94.79	93.76	92.91	n.a.	n.a.
Philippines	44.00	15.00	10.50	8.75	8.53	8.55	9.31	9.50	n.a.	n.a.	n.a.
Singapore	9.40	7.20	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
Taiwan	10.00	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	n.a.	n.a.
Thailand	16.50	15.50	12.00	12.00	12.00	12.00	n.a.	n.a.	n.a.	n.a.	n.a.
Venezuela	16.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	n.a.

*Percent per month.

**Spread above monetary correction until Feb 86; nominal rate of interest until Jan 87; spread above LBC rate thereafter.

Domestic corporate bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	12.25	10.15	8.88	8.55	8.65	9.60	9.55	9.55	9.90	10.15	10.75
Canada	12.42	10.74	10.18	9.90	9.79	10.44	10.44	10.46	11.05	11.74	11.74
France	12.94	11.76	10.18	10.06	9.79	9.82	10.05	10.38	10.37	10.77	n.a.
Germany	7.20	6.90	6.50	6.40	6.60	6.50	6.40	6.50	6.60	6.70	n.a.
Netherlands	7.51	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Norway	12.75	14.00	14.94	n.a.	16.37	15.47	14.22	16.21	n.a.	n.a.	n.a.
Spain	18.32	14.92	13.40	14.13	14.82	15.52	15.76	16.39	16.94	17.52	17.39
Sweden	12.33	13.25	11.99	12.63	12.15	12.15	12.89	12.47	12.68	12.89	n.a.
Switzerland	5.09	4.93	4.72	4.56	4.58	4.57	4.56	4.56	4.53	4.55	4.72
United Kingdom	11.64	11.47	11.71	10.58	10.21	10.09	10.19	10.15	10.55	11.41	11.43
Japan	7.10	6.79	5.93	5.35	5.20	4.99	4.71	5.20	n.a.	6.00	n.a.
Korea	15.00	13.60	12.80	12.70	13.00	13.00	12.80	12.70	12.70	n.a.	n.a.
Venezuela	18.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	n.a.	n.a.

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